

WHAT IS CLAIMED IS:

1. A piping structure in a tire vulcanizing machine comprising:

upper and lower metal molds;

a bladder expanded and contracted by supplying and discharging the fluid; and

the bladder expanded by supplying the fluid being pressed to an inner surface of the raw tire which is set to an inner portion of said metal molds,

wherein the piping structure comprises:

a panel block in which a main flow path connected to a main pipe connected to an inner portion of said bladder, and a plurality of auxiliary flow paths connected to a plurality of branch pipes are formed in an inner portion of a block main body; and

a plurality of panel valves in which a valve body for opening and closing a valve port is provided in an inner portion of the valve main body, an inflow path and an outflow path are communicated in an open state of the valve port by the valve body, and the inflow path and the outflow path are communicated and shut off by opening and closing the valve port by means of said valve body,

wherein the block main body of said panel block is formed long in a vertical direction, and a block side connection surface is approximately perpendicularly formed in a side surface thereof,

wherein a valve side connection surface is approximately perpendicularly formed in one side of an outer surface of said valve main body, and a plurality of panel valves are attached to the block main body side by side in a vertical direction in a state in which the valve side connection surface is connected face to face to said block side connection surface,

wherein in each of the panel valve mounting portions, a first outflow port from a first inflow port and the outflow path to said inflow path is formed in the valve side connection surface of the panel valve, a second outflow port from a second inflow port and the auxiliary flow path to said main flow path is formed in the block side connection surface of the panel block, and said valve side connection surface and the block side connection surface are connected face to face in a state said first inflow port and said second outflow port are matched and said second inflow port and said first outflow port are matched.

2. Plurality of panel valves according to claim 1 include a steam supply valve, a gas supply valve, a shaving gas supply valve, a gas recovery valve, an exhaust valve and the like, and said exhaust valve is arranged at a lowest position.